

MEMORANDUM

DATE: December 9, 2014

TO: Barry Margolese
Amalani LLC

FROM: Curtis Chin, P.E.
TENW

SUBJECT: Maplewood Townhomes
Trip Generation and Project Trip Distribution/Assignment
TENW Project No. 5000

This memorandum documents the trip generation and project trip distribution/assignment for the proposed Maplewood Townhome project.

Project Description

The proposed Maplewood Townhome project would be located at 8420 167th Ave NE and would include the development of 8 townhome units on a currently vacant site. Vehicle access to the site would be provided by a single driveway on 167th Ave NE.

Trip Generation

The weekday daily, AM and PM peak hour trip generation estimates for the proposed 8 townhomes were based on methodology published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition. The resulting weekday daily, AM and PM peak hour trips are summarized in **Table 1**. A detailed trip generation estimate is included in **Attachment A**.

Table 1
Trip Generation Summary

Time Period	Net Trips Generated		
	In	Out	Total
Weekday Daily	35	36	71
Weekday AM Peak Hour	1	6	7
Weekday PM Peak Hour	5	3	8

As shown in **Table 1**, the proposed Maplewood Townhome project is estimated to generate a total of 71 weekday daily trips with 7 trips occurring during the weekday AM peak hour (1 entering, 6 exiting), and 8 trips occurring during the weekday PM peak hour (5 entering, 3 exiting).

Trip Distribution and Assignment

The distribution of project-generated traffic was estimated based on existing travel patterns in the vicinity of the site. Existing peak hour turning movement counts in the project vicinity were used to estimate the project trip distribution. The general project trip distribution for the Maplewood Townhome project is summarized in **Table 2**.

Table 2
Project Trip Distribution

Route (Direction)	Trip Distribution
164 th Ave NE (north)	25%
166 th Ave NE (north)	10%
NE 85 th St / NE 83 rd St (west)	30%
164 th Ave NE (south)	10%
166 th Ave NE (south)	25%
TOTAL	100%

Based on the estimated trip distribution travel patterns in the area, the daily project trips were assigned to the street network. The trip assignment takes into account turn restrictions at the intersection of 166th Ave NE/NE 85th St. The resulting daily project trip assignment is shown in **Attachment B**.

If you have any questions regarding the information presented in this memo, please contact me at (425) 250-5003 or chin@tenw.com.

cc: Joshua Beard, R.L.A., Core Design
Jeff Haynie, P.E. Principal, TENW

Attachment

ATTACHMENT A

Trip Generation

Land Use	Size	Units ¹	ITE LUC ²	Trip Rate ²	Directional Split ²		Vehicle Trip Generation		
					Enter	Exit	Enter	Exit	Total
DAILY									
Proposed Use: Townhomes	8	DU	230	equation	50%	50%	35	36	71
NEW DAILY TRIP GENERATION:							35	36	71
AM PEAK HOUR									
Proposed Use: Townhomes	8	DU	230	equation	17%	83%	1	6	7
NEW AM PEAK HOUR TRIP GENERATION:							1	6	7
PM PEAK HOUR									
Proposed Use: Townhomes	8	DU	230	equation	67%	33%	5	3	8
NEW PM PEAK HOUR TRIP GENERATION:							5	3	8

¹ DU = Dwelling Units.

² Land Use Code, trip rates, and entering/exiting splits based on ITE Trip Generation Manual, 9th Edition, 2012.



Attachment B: Daily Project Trip Distribution and Assignment